PATENTS

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Pierre PETIT et al.

Serial No. (unknown)

Filed herewith

PROCESS AND REACTOR FOR
TREATING A GAS BY MEANS OF
A REGENERABLE ACTIVE PACKING

PRELIMINARY AMENDMENT

Commissioner for Patents

Washington, D.C. 20231

Sir:

Prior to the first Official Action and calculation of the filing fee, please amend the above-identified application as follows:

IN THE CLAIMS:

Amend claim 5 as follows:

--5. (amended) Process according to claim 1, characterized in that, during said phase, said marginal region is placed in communication with a point which lies at a pressure different from that of an adjacent region of the packing.--

Amend claim 7 as follows:

--7. (amended) Process according to claim 1, characterized in that said phase is a phase for flushing of the packing by means of a regeneration gas.--

Amend claim 9 as follows:

--9. (amended) Process according to claim 8, characterized in that during said phase, said marginal region is placed in communication with a point which lies at a pressure different from that of an adjacent region of the packing, and said point is a point of a conduit for evacuation of the regeneration gas having passed through the packing.--

Amend claim 10 as follows:

--10. (amended) Process according to claim 8, characterized in that during said phase, said marginal region is placed in communication with a point which lies at a pressure different from that of an adjacent region of the packing, and said point is a point of a supply conduit for regeneration gas.--

Amend claim 11 as follows:

--11. (amended) Process according to claim 1, characterized in that said phase is a phase for treatment of the said gas.--

Amend claim 12 as follows:

--12. (amended) Process according to claim 10, characterized in that during said phase, said marginal region is placed in communication with a point which lies at a pressure different from that of an adjacent region of the packing, and said point is the delivery of a compressor pierced onto the conduit for production of treated gas.--

Amend claim 13 as follows:

--13. (amended) Process according to claim 1, characterized in that said phase is a phase for recompression of the packing.--

Amend claim 14 as follows:

--14. (amended) Process according to claim 12, characterized in that during said phase, said marginal region is placed in communication with a point which lies at a pressure different from that of an adjacent region of the packing, and said point is a point of the conduit for production of treated gas.--

Amend claim 15 as follows:

--15. (amended) Process according to claim 1, characterized in that said phase is a phase for decompression of the packing.--

Amend claim 16 as follows:

--16. (amended) Process according to claim 1, characterized in that the packing comprises two concentric annular beds, and in that said marginal region comprises the upper region, forming a guard, of each annular bed.--

Amend claim 20 as follows:

--20. (amended) Process according to claim 1, characterized in that said treatment is a purification by adsorption of atmospheric air intended to be distilled.--

Amend claim 21 as follows:

--21. (amended) Process according to claim 1, characterized in that said treatment is a separation of a gaseous mixture, especially a production of oxygen from atmospheric air, by pressure modulated adsorption optionally under vacuum.--

Amend claim 25 as follows:

--25. (amended) Reactor according to claim 23, characterized in that the packing comprises at least one bed of active particles, especially of adsorbent.--

Amend claim 27 as follows:

--27. (amended) Reactor according to claim 26, characterized in that said conduit or said passage connects

the space situated above the bed to the surrounding atmosphere.--

Amend claim 28 as follows:

--28. (amended) Reactor according to claim 26, characterized in that said conduit or said passage connects the space situated above the bed to a conduit for evacuation of gas from the bottom of the reactor.--

Amend claim 29 as follows:

--29. (amended) Reactor according to claim 26, characterized in that said conduit or said passage connects the space situated above the bed to a conduit for supply of auxiliary gas.--

Amend claim 31 as follows:

--31. (amended) Reactor according to claim 29, characterized in that said supply conduit is equipped with a compressor.--

Respectfully submitted,

YOUNG & THOMPSON

By 

Benoît Castel
Attorney for Applicants
Customer No. 000466
Registration No. 35,041
745 South 23rd Street
Arlington, VA 22202
Telephone: 703/521-2297

March 16, 2001

VERSION WITH MARKINGS TO SHOW CHANGES MADE

5. (amended) Process according to ~~any one of~~ claim~~s~~ 1~~ to 4~~, characterized in that, during said phase, said marginal region is placed in communication with a point which lies at a pressure different from that of an adjacent region of the packing.

7. (amended) Process according to ~~any one of~~ claim~~s~~ 1~~ to 6~~, characterized in that said phase is a phase for flushing of the packing by means of a regeneration gas.

9. (amended) Process according to ~~claims 5 and~~ claim 8~~ taken together~~, characterized in that during said phase, said marginal region is placed in communication with a point which lies at a pressure different from that of an adjacent region of the packing, and said point is a point of a conduit for evacuation of the regeneration gas having passed through the packing.

10. (amended) Process according to ~~claims 5 and~~ claim 8~~ taken together~~, characterized in that during said phase, said marginal region is placed in communication with a point which lies at a pressure different from that of an adjacent region of the packing, and said point is a point of a supply conduit for regeneration gas.

11. (amended) Process according to ~~any one of~~ claim~~s~~ 1~~ to 6~~, characterized in that said phase is a phase for treatment of the said gas.

12. (amended) Process according to ~~claims 5 and~~ claim 10~~ taken together~~, characterized in that during said phase, said marginal region is placed in communication with a point which lies at a pressure different from that of an adjacent region of the packing, and said point is the delivery of a compressor pierced onto the conduit for production of treated gas.

13. (amended) Process according to ~~any one of~~ claim~~s~~ 1~~ to 6~~, characterized in that said phase is a phase for recompression of the packing.

14. (amended) Process according to ~~claims 5 and~~ claim 12~~ taken together~~, characterized in that during said phase, said marginal region is placed in communication with a point which lies at a pressure different from that of an adjacent region of the packing, and said point is a point of the conduit for production of treated gas.

15. (amended) Process according to ~~any one of~~ claim~~s~~ 1~~ to 6~~, characterized in that said phase is a phase for decompression of the packing.

16. (amended) Process according to ~~any one of~~ claim~~s~~ 1~~ to 14~~, characterized in that the packing comprises

two concentric annular beds, and in that said marginal region comprises the upper region, forming a guard, of each annular bed.

20. (amended) Process according to ~~any one of~~ claim~~s~~ 1~~ to 19~~, characterized in that said treatment is a purification by adsorption of atmospheric air intended to be distilled.

21. (amended) Process according to ~~any one of~~ claim~~s~~ 1~~ to 19~~, characterized in that said treatment is a separation of a gaseous mixture, especially a production of oxygen from atmospheric air, by pressure modulated adsorption optionally under vacuum.

25. (amended) Reactor according to ~~any one of~~ claim~~s 22 to 24~~ 23, characterized in that the packing comprises at least one bed of active particles, especially of adsorbent.

27. (amended) Reactor according to claim 26~~ when it depends from claim 23 or 24~~, characterized in that said conduit or said passage connects the space situated above the bed to the surrounding atmosphere.

28. (amended) Reactor according to claim 26~~ when it depends from claim 23 or 24~~, characterized in that said

conduit or said passage connects the space situated above the bed to a conduit for evacuation of gas from the bottom of the reactor.

29. (amended) Reactor according to claim 26~~ when it depends from claim 23 or 24~~, characterized in that said conduit or said passage connects the space situated above the bed to a conduit for supply of auxiliary gas.

31. (amended) Reactor according to claim 29~~ or 30~~, characterized in that said supply conduit is equipped with a compressor.